# THE RELATIONSHIP BETWEEN PROFESSIONAL IDENTITY AND JOB ENGAGEMENT OF YOUNG TEACHERS IN XX PRIVATE COLLEGE IN SHANDONG PROVINCE, CHINA

Ziqian Liu 1\*

<sup>1</sup> Graduate School, Stamford International University of Thailand \*Corresponding Author, E-mail: Ziqian.L@qq.com

Abstract: The purpose of this study is to investigate and analyze the current status of teacher professional identity and job engagement among young teachers at XX Private College in Shandong Province, examine the mean differences under various background variables, and explore the correlation between the two. Utilizing the Teacher Professional Identity Scale and the Job Engagement Scale as survey instruments, this study comprehensively understands the levels of professional identity and job engagement among young teachers at XX Private College in Shandong Province across different backgrounds. Methods such as t-tests, ANOVA (Analysis of Variance), and correlation analysis were employed to explore the factors influencing the professional identity and job engagement of young teachers at XX Private College in Shandong Province and to analyze the relationship between teachers' professional identity and job engagement. The researcher selected the Teacher Professional Identity and Job engagement Scales as survey instruments and conducted a questionnaire survey among 150 young teachers at XX Private College in Shandong Province, resulting in 119 valid responses. The study found that the mean scores of the various dimensions of professional identity among young teachers at XX College in Shandong Province ranged from 3.4 to 3.7, indicating a relatively high overall level. The mean scores of the dimensions of job engagement among young teachers at XX College in Shandong Province all exceeded 3.5, suggesting that their job engagement is generally high. There are some significant differences in teachers' professional identity across different background variables, but gender differences in professional identity are insignificant. There are differences in teachers' subjective well-being across different background variables. Teachers' professional identity has a significant positive correlation with their subjective well-being. There are differences in teachers' professional identity across different background variables. Similarly, differences exist in teachers' job engagement across different background variables. The professional identity and job engagement of young teachers at XX College in Shandong Province has a significant correlation. Based on the study results, XX College in Shandong Province should implement targeted support to enhance teachers' professional identity. Additionally, the college should implement differentiated incentives to improve teachers' job engagement. Furthermore, XX College in Shandong Province should enhance professional identity and



strengthening job engagement.

Keywords: Professional Identity, Job Engagement, Young Teachers

#### Introduction

## 1. Research Background

In recent years, Shandong Province, China, has prioritized the development of private universities in higher education. Provincial finances have increased special fund allocations and innovative support, leading to a rising number of enrolled students. With the growth, private universities need to expand their teaching staff. Young teachers are the core force driving their development, responsible for education, teaching, and research. However, many private universities in Shandong face challenges in improving teaching quality and talent cultivation efficiency. Thus, promoting the development of young teachers is crucial for the progress of private universities (Li, 2023).

Teachers' professional identity, influenced by various factors, is vital for private universities' construction and teachers' love for their profession (Huo & Wang, 2024). Yet, research on young teachers' professional identity in Chinese private universities lacks a complete system, with issues like identity isolation and career development obstacles. Job engagement, an individual's positive work immersion, affects teachers' professional growth, students' healthy growth, and school education quality. This study, focusing on young teachers at Shandong XX College, will explore factors influencing their professional identity and job engagement and analyze their relationship, providing references for stabilizing the teaching staff and enhancing education in Shandong's private universities.

- 2. Research Problems
- 1) What is the current status of professional identity among young teachers at XX College in Shandong Province?
- 2) What is the current status of job engagement among young teachers at XX College in Shandong Province?
- 3) Are there differences in the professional identity of young teachers at XX College in Shandong Province across different background variables?
- 4) Are there differences in the job engagement of young teachers at XX College in Shandong Province across different background variables?
- 5) Is there a correlation between the professional identity and job engagement of young teachers at XX College in Shandong Province?

#### 3. Research Significance

The theoretical significance of this study lies in its investigation of the professional identity and job engagement of young teachers at XX College in Shandong Province. It enriches the theoretical outcomes of psychological research on young teachers at private colleges, deepens the theory related to

teachers' professional identity, and offers theoretical references for young teachers at private colleges to deepen their professional emotions and for school administrators to formulate incentive mechanisms for teachers. The research on the professional identity and job engagement of young teachers at XX College in Shandong Province can provide suggestions to educational departments. It can enhance the construction of the young faculty at private colleges, improve the professional identity of young teachers, increase their work enthusiasm, reduce the loss of talent resources, and comprehensively and evenly improve the welfare and social status of young teachers at private colleges.

# **Research Objectives**

- 1) To understand the current status of professional identity among young teachers at XX College in Shandong Province.
- 2) To understand the current status of job engagement among young teachers at XX College in Shandong Province.
- 3) To investigate the differences in professional identity among young teachers at XX College in Shandong Province across various background variables.
- 4) To investigate the differences in job engagement among young teachers at XX College in Shandong Province across various background variables.
- 5) To explore the relationship between the two variables of professional identity and job engagement among young teachers at XX College in Shandong Province.

# **Literatures Review**

# 1. Concept of Job engagement

At the end of the last century, the ratio of psychological research papers on negative states to those on positive states of humans was as high as 17:1 (Diener et al. 1999). Consequently, Seligman, the former president of the American Psychological Association, initiated the positive psychology movement. Kahn (1990) viewed job engagement as employees' self-governance in their work roles, which entails the integration of oneself with the work role and self-employment and self-expression in physiological, cognitive, and emotional aspects. Job engagement encompasses three primary psychological states: meaningfulness, safety, and availability. Additionally, Rothbard (2001) conceptualized job engagement as a psychological state, dividing it into two key components: attention and absorption.

## 2. Research on Factors Influencing Job engagement

Factors influencing job engagement can be categorized into three aspects: individual characteristics, including psychological states, personality traits, and sense of efficacy. Langelaan et al. (2006), neuroticism, extraversion, and flexibility are significant predictors of job engagement, with individuals who are highly engaged tending to have low neuroticism, high extraversion, and high

flexibility. Work-related factors influence job engagement through certain mediator variables. May et al. (2004) found that psychological state variables mediate the relationship between job characteristics and job engagement: job enrichment and job role fit, encouragement from colleagues, and support from supervisors, as well as job resource availability, positively impact job engagement through psychological meaningfulness, psychological safety, and psychological availability, respectively, while adhering to norms among colleagues and participating in external activities negatively affect job engagement through psychological safety and availability.

# 3. Measurement of Job engagement

Although Kahn (1990) proposed the concept and structure of job engagement, he did not develop a corresponding measurement questionnaire, and there are only a few measurement questionnaires based on his theory. May et al. (2004) developed a 24-item pretest scale based on Kahn's theory, but the results of exploratory factor analysis did not yield three evenly and independently distributed dimensions. Therefore, they selected 13 items to form an overall scale ( $\alpha = 0.77$ ), which well reflected the three dimensions of physical, cognitive, and emotional engagement. Rich et al. (2010) developed a new scale based on Kahn's theory, including physical, emotional, and cognitive dimensions, with six items for each dimension on a 5-point scale. Rich's job engagement scale is a measurement method consistent with Kahn's concept of job engagement. Since Kahn's job engagement describes individuals' physical, emotional, and cognitive aspects at work, distinguishing it from the antecedents and consequences of job engagement, Rich et al.'s scale has a high reference value. Maslach et al. (2001) developed the MBI scale to measure job burnout based on Kahn's theory. Their theory suggests that job engagement and job burnout are opposite, with opposite dimensions; the exhaustion, cynicism, and inefficacy dimensions of job burnout correspond to vigor, dedication, and absorption in job engagement. The reverse scoring of the MBI scale can be used to measure job engagement, meaning that the MBI is both a job burnout scale and a job engagement scale.

4. Research on the Relationship Between Teachers' Professional Identity and Job engagement

According to previous research in China, the subjects of such studies are mostly primary and secondary school teachers. Jin (2015) surveyed 542 primary and secondary school teachers and found a significant positive correlation between teachers' professional identity and job engagement. Teachers had a relatively high level of professional identity, but factors such as teaching pressure and low income also affected their job engagement to some extent, indicating that the higher teachers' professional identity, the more likely they were to fully devote themselves to teaching work and accept various challenges in their work. Chen & Wu (2018) surveyed 635 young teachers from 40 undergraduate universities and found that professional identity and job engagement had a causal relationship. The higher the level of professional identity, the stronger the teachers' job engagement, and vice versa.

5. Summary of Related Literature

Teachers' professional identity and job engagement influence their self-perception, teaching



effectiveness, and professionalism, and are interrelated. Current research on these concepts lacks a unified understanding, with studies being neither comprehensive nor in-depth, and dominated by diverse qualitative analyses in China. Scholars' understanding has evolved, leading to diverse research methods including both qualitative and quantitative approaches, with Chinese scholars favoring the latter or a mix. Research subjects are mostly primary and secondary school teachers, with few studies on private university teachers, especially young ones. Given the growth of private education in Shandong and the influx of young teachers, research on their intrinsic professional emotions is crucial for strengthening faculty teams and improving teaching quality.

# Methodology

The research adopts a structured approach, starting with a literature analysis to clarify concepts and research status, followed by a questionnaire design using validated scales to measure professional identity and job engagement among young teachers. Data collection employs convenience sampling, targeting 150 young teachers from Shandong XX College, with 119 valid responses received (79.3% response rate). Statistical analysis, conducted via SPSS 22.0, includes descriptive statistics, reliability/validity tests, independent sample t-tests, one-way ANOVA, and Pearson correlation analysis to explore differences and relationships in professional identity and job engagement across demographic variables.

The questionnaire comprises demographic questions and two validated scales: the 18-item Teacher Professional Identity Questionnaire (covering professional values, role values, professional belonging, and professional behavior tendency) and the 9-item Teacher Job Engagement Questionnaire (measuring vigor, dedication, and absorption). Data were collected online, with each questionnaire assigned a unique number for the organization in Excel 2019. After cleaning, the data were imported into SPSS 22.0 for inspection and item analysis, ensuring robustness for subsequent statistical tests. This methodical design ensures representative sampling and rigorous analysis to address research objectives effectively.

#### **Results**

# 1. Reliability and Validity Analysis

In this study, two indicators were used to measure reliability: homogeneity and split-half reliability. The results indicated that the internal consistency coefficients ( $\alpha$  coefficients) for factors ranged between 0.720 and 0.864, while the split-half reliability coefficients ranged between 0.744 and 0.862. The internal consistency coefficient for the overall questionnaire was 0.893, and the split-half reliability coefficient was 0.834. This suggests that the "Teachers' Professional identity Scale" possesses good reliability (Wei, 2008).

For the "Job engagement Scale," the Cronbach's Alpha coefficients for the three subscales were

0.727 (Vigor), 0.846 (Dedication), and 0.725 (Absorption), respectively. The Cronbach's Alpha coefficient for the overall scale was 0.911, indicating that the measurement tool exhibits good stability, and has high reliability (Zhao, 2020).

Due to the lack of quantifiable indicators for determining content validity, we consulted 12 doctoral candidates in educational psychology on the theoretical structure of teachers' professional identity and corresponding items, receiving consistent approval. Therefore, the Teachers' Professional Identity Scale possesses good content validity. For the construct validity of the scale, correlations between factors and between factors and the total were calculated. The results showed significant correlations between all factors, with correlation coefficients ranging from 0.384 to 0.598, indicating moderate correlations. The correlation coefficients between each factor (role values, professional behavior tendencies, professional values, professional belongingness) and the total score of the scale were 0.842, 0.737, 0.779, and 0.709, respectively, showing significant correlations and higher than those between factors. This suggests that the factors of the scale have a certain degree of independence while reflecting the content intended to be measured by the overall scale. Thus, the Teachers' Professional Identity Scale demonstrates good validity (Wei, 2008).

Convergent validity analysis was conducted on the three factors and nine analysis items of the Job engagement Scale. The corresponding AVE values (0.71, 0.83, 0.78) of the three factors were all above 0.5, and the CR values (0.87, 0.94, 0.91) were all greater than 0.7, indicating good convergent validity. Factors were extracted based on the criterion of eigenvalues greater than 1, and exploratory factor analysis identified three main components with eigenvalues of 3.58, 3.08, and 1.38, respectively. The variance explained by these three factors after rotation was 39.76%, 34.21%, and 15.36%, respectively, with a cumulative variance explained after rotation of 89.32%. The factors to which the nine items in the Job Engagement Scale belonged were consistent with the original hypothetical dimensions, and there was no cross-loading phenomenon. Using the varimax rotation method, it was found that the commonality values corresponding to all research items were above 0.4. Additionally, the absolute values of the loading coefficients for each factor were all greater than 0.4, indicating a correspondence between the three factors extracted from the Job Engagement Scale and the research items. Therefore, the scale possesses high construct validity (Guo, 2022).

## 2. Demographic Distribution of Respondents

The research data presents the basic information of 119 participants, encompassing gender, age, income, professional title, and marital status. In terms of gender, the ratio between males and females is relatively balanced, with females slightly outnumbering males at 52.1%. Regarding age distribution, participants are concentrated primarily within the 26-35 age bracket, with those aged 26-30 making up the highest proportion at 35.3%. This absorption in a younger age group reflects the youthful characteristics of the research sample. For income, participants have an annual income ranging from 60,001 to 80,000 yuan, accounting for 44.5%, followed by those earning between 40,001 and 60,000

yuan, who constitute 31.1% of the sample. Income exhibits a high level, while the number of participants in the high-income bracket (above 80,000 yuan) and low-income bracket (40,000 yuan and below) is relatively small. In professional titles, the sample covers four levels: assistant professors, lecturers, associate professors, and professors, with lecturers being the most numerous at 31.9%, followed by assistant professors at 27.7%. The proportions of associate professors and professors are relatively low, indicating that the sample has a lower representation of higher-level titles and is composed of individuals holding middle to lower-level titles. In marital status, the proportions of married and unmarried individuals are close, with married individuals slightly outnumbering unmarried ones at 52.9%.

3. Current Status of Professional Identity Among Young Teachers at XX College, Shandong Province

The research analyzes the professional identity of young teachers at XX College, Shandong Province, using a Likert scale grading system, revealing that the overall level of professional identity is relatively high, with mean values for various factors ranging between 3.4 and 3.7. Professional belongingness scores the highest (M=3.71), followed by professional values (M=3.55) and professional behavior norms (M=3.53), while professional role identity is slightly lower (M=3.41) but still high. Standard deviations (0.899-0.982) indicate minor individual differences across dimensions. These findings suggest strong professional identification, particularly in belongingness, reflecting a cohesive value system and positive emotional attachment to their profession among young teachers.

4. The Current Status of Job engagement Among Young Teachers at XX College in Shandong Province

The data analysis reveals that young teachers at XX College in Shandong Province exhibit a relatively high overall level of job engagement, with mean values for vigor (3.59), dedication (3.66), and absorption (3.71) all exceeding 3.5. Absorption scores highest, indicating strong focus and immersion in work, followed by dedication, reflecting enthusiasm and commitment, while vigor, though slightly lower, still demonstrates sustained energy. Standard deviations (1.003–1.110) suggest moderate individual differences, particularly in dedication and absorption. These findings highlight young teachers' positive work attitudes, high professionalism, and emotional-cognitive engagement, underscoring their ability to perform tasks energetically and with strong identification toward their profession.

5. Statistical Analysis Results of the Data

Using SPSS software, an independent samples t-test, and one-way ANOVA were conducted to analyze the differences in job engagement and professional identity among young teachers at XX College in Shandong Province across various background variables. Additionally, Pearson correlation analysis was employed to explore the relationship between professional identity and job engagement among these young teachers, yielding research findings to test the research hypotheses.

Table 1: Verification Results of Research Hypotheses

	Hypothesis	Result
H1	The professional identity of young teachers at XX College in Shandong Province	Established
	differs demographically.	
H1a	There are differences in professional identity between male and female teachers	Established
	among young teachers at XX College in Shandong Province.	
H1b	There are differences in professional identity among young teachers of different	Established
	ages at XX College in Shandong Province.	
H1c	There are differences in professional identity among young teachers with different	Established
	professional titles at XX College in Shandong Province.	
H1d	There are differences in professional identity among young teachers with different	Established
	annual incomes at XX College in Shandong Province.	
H1e	There are differences in professional identity among young teachers with different	Established
	marital statuses at XX College in Shandong Province.	
H2	The job engagement of young teachers at XX College in Shandong Province differs	Established
	demographically.	
H2a	There are differences in job engagement between male and female teachers among	Established
	young teachers at XX College in Shandong Province.	
H2b	There are differences in job engagement among young teachers of different ages at	Established
	XX College in Shandong Province.	
Н2с	There are differences in job engagement among young teachers with different	Established
	professional titles at XX College in Shandong Province.	
H2d	There are differences in job engagement among young teachers with different	Established
	annual incomes at XX College in Shandong Province.	
H2e	There are differences in job engagement among young teachers with different	Established
	marital statuses at XX College in Shandong Province.	
НЗ	There is a significant correlation between professional identity and job engagement	Established
	among young teachers at XX College in Shandong Province.	

## **Discussion**

1. The Current Status of Professional Identity Among Young Teachers at XX College in Shandong Province

The professional identity of young teachers at XX College in Shandong Province is high, reflecting their positive professional attitude and psychological state, with clear understanding of professional responsibilities and behavioral requirements. However, some teachers face instability due to inexperience or external pressures. While young teachers generally recognize the significance of

educational work, external factors like salary and career opportunities can influence their values. The college's achievements in institutional development and cultural atmosphere foster a strong sense of belonging among young teachers, but continuous policy support and humanistic care are needed to address potential challenges related to career bottlenecks and workload. Strengthening career planning guidance and improving working conditions can further enhance their professional identity.

2. The Current Status of Job Engagement Among Young Teachers at XX College in Shandong Province

Young teachers at XX College in Shandong Province exhibit high overall job engagement, with mean values exceeding 3.5 across vigor, dedication, and absorption, reflecting their strong enthusiasm and responsibility. High work energy and enthusiasm are attributed to their recognition of the educational cause, while dedication is closely related to the university's cultural atmosphere and professional value cultivation. Young teachers demonstrate high immersion in teaching and research, contributing to improved quality and efficiency. However, potential issues like excessive pressure and uneven resource distribution may exist, necessitating attention to mental health and career development to sustain job engagement and enhance teaching and research development.

3. Significant Differences in Teachers' Professional Identity Across Different Background Variables

Teachers' professional identity is influenced by multiple factors: female teachers have a slightly higher sense of professional role identity; young teachers excel in role identity but lack belonging, middle-aged teachers are stable in behavior norms and belonging with 36-40-year-olds facing a bottleneck, necessitating age-based support; assistants are positive about role identity and belonging, associate professors score high in conduct norms and values, professors are stable in values but low in other areas, requiring title-differentiated strategies; middle-income teachers perform well in role identity and values, low-income adhere to conduct norms, high-income show balanced performance, indicating income-based support; married teachers score higher in role identity and belonging, unmarried excel in conduct norms and values, thus tailored measures for each marital status are needed to enhance professional identity.

4. Significant Differences in Job Engagement Among Teachers with Different Background Variables

Teachers' job engagement varies by gender, age, professional title, income, and marital status. Female teachers show more vigor and dedication, while male teachers excel in absorption; teachers aged 31 - 35 perform best across all job engagement dimensions, with younger ones lacking vigor and dedication and those aged 36 - 40 facing distractions. Professors have high vigor, lecturers show strong dedication, and assistants focus well on tasks, with higher-titled teachers excelling in vigor and dedication but lacking absorption. High-income teachers score high in all job engagement aspects, while married teachers have better vigor and absorption, and unmarried ones show stronger dedication.

Tailored support measures based on these factors can enhance job engagement and teaching quality.

5. Significant Positive Correlation Between Young Teachers' Professional Identity and Job Engagement

The research indicates a significant positive correlation between teachers' professional identity and job engagement, suggesting that stronger professional identification leads to higher levels of vigor, dedication, and absorption in work. Enhancing teachers' professional identity not only increases job engagement but also improves teaching quality and job satisfaction. Educational administrators can promote teachers' work performance by strengthening their professional identity, creating a positive work environment, and providing tailored support measures to address potential challenges and enhance overall job engagement.

#### **Conclusions**

### 1. Research Overview and Conclusions

Chapter One introduces the study's background, significance, hypotheses, objectives, and scope. Chapter Two reviews literature on teachers' professional identity and job engagement, including measurement studies and influencing factors. Chapter Three details the research methodology. Chapter Four analyzes data using descriptive statistics and hypothesis testing. Chapter Five, the current section, concludes that the study found demographic differences in both professional identity and job engagement among young teachers at XX College in Shandong Province across gender, age, professional title, annual income, and marital status, and also identified a significant correlation between professional identity and job engagement.

#### 2. Research Limitations

The limitations of this study are primarily reflected in the representativeness of the sample, research design, and data collection methods. This study was conducted solely at XX College in Shandong Province, and the regionality of the sample limits the generalizability of the research results. Due to the use of a cross-sectional research design, the study can only reveal the correlation between professional identity and job engagement, rather than confirming a causal relationship. Additionally, data collection relied on questionnaires, which may have led to self-report bias. Teachers may have been influenced by the social desirability effect, failing to accurately reflect their true levels of professional identity and job engagement. Furthermore, the study did not consider other factors that may affect teachers' job engagement, such as work stress and organizational support, which may affect the comprehensiveness and accuracy of the research conclusions.

#### 3. Suggestions and Implementation Strategies

The study reveals significant demographic differences in teachers' professional identity and job engagement at XX College in Shandong Province, necessitating targeted strategies. For professional identity, measures should address gender disparities by supporting male teachers, providing

development support for young teachers, enhancing achievement recognition for middle-aged teachers, and offering emotional care for elderly teachers. Title-based differences call for optimizing evaluation mechanisms, while income-related gaps require fair salary adjustments and non-economic incentives. Marital status differences suggest flexible arrangements for married teachers and development opportunities for unmarried ones. For job engagement, strategies should focus on gender-balanced support, hierarchical management based on career stages, title evaluation optimization, reasonable compensation systems, and flexible work arrangements. Since professional identity and job engagement are positively correlated, enhancing professional identity through value guidance, development opportunities, and recognition can improve job engagement, creating a positive campus culture and work environment to elevate overall educational quality.

#### References

- Chen, S. R., & Wu, Q. S. (2018). A Study on the Relationship between Psychological Capital and Professional Identity of Young College Teachers On the Mediating Role of Job Engagement. *University Education Science*, 3(11), 59-68.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological bulletin*, 125(2), 276.
- Guo, J. (2022). Research on the Mechanism of the Impact of Workplace Incivility on Job Engagement (Doctoral dissertation, Southwest Jiao tong University). *Doctoral Degree*.
- Huo, D. J., & Wang, R. (2024). A spatial analysis and solution path study on the identity dilemma of young university teachers in China. *Heilongjiang Research on Higher Education*, 6(2), 115-120.
- Jin, M. (2015). A Study on the Relationship among Professional Identity, Psychological Capital, and Job Engagement of Primary and Secondary School Teachers (Master's thesis, Nanjing Normal University). *Master's Degree*.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4), 692-724.
- Langelaan, S., Bakker, A. B., Van Doornen, L. J., & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and individual differences*, 40(3), 521-532.
- Li, D. D. (2023). A discussion on the career development of young teachers in private universities. Leadership Science Forum, 12(1), 155-157.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). *Job burnout. Annual review of psychology, 52*(1), 397-422.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of occupational*

and organizational psychology, 77(1), 11-37.

- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of management journal*, *53*(3), 617-635.
- Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative science quarterly, 46*(4), 655-684.
- Wei, S. H. (2008). Research on Teachers' Professional Identity (Doctoral dissertation, Southwest University). *Doctoral Degree*.
- Zhao, J. W. (2020). A Study on the Impact of Organizational Support Perception on Job Engagement of Young College Teachers (Master's thesis, Shanxi University of Finance and Economics). *Master's Degree*.